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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/165,513	10/02/1998	VEERASAMY VIJAYEN	14089-002540	7976

7590 06/18/2002

MARK D BARRIS  
TOWNSEND AND TOWNSEND AND CREW  
8TH FLOOR  
TWO EMBARCADERO CENTER  
SAN FRANCISCO, CA 941113834

EXAMINER

RESAN, STEVAN A

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 06/18/2002

18

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-18

# Office Action Summary

Application No.

09/165513

Applicant(s)

VEERJAMMY el al

Examiner

REAW

Group Art Unit

1773

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 4-15-02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 38-46, 48-59, 61-63 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 38-46, 48-59, 61-63 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. The request filed on 4-15-2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/165513 is acceptable and a CPA has been established. An action on the CPA follows.

2. Applicants are requested to correct the inventors name ~~VEERASAMY VIJAYEN~~<sup>J</sup> to VIJAYEN VEERASAMY since it appears <sup>that</sup> ~~the~~ VEERASAMY<sub>x</sub> is the surname.

3. Claims 38-46, 48-59, 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veerasamy ref BU alone for the reasons of record or in combination with Weiler ref BQ (of record) and Nakayama et al.

The publication by Mr. Weiler published over a year prior to the U.S. priority documents and constitute<sup>s</sup> prior art to the claims of this application.

It appears that Mr. Weiler teaches the same apparatus, method and resultant product as the present application see Table 2-1 page 6; 4-3 page 38; 4-4 page 40; 6-1 page 56; 6-4 page 60; and 6-19 page 80 of Weiler.

Also the following drawings of the present application correspond to those of Weiler:

Application	Weiler
1A	Fig 6-35 page 96
1B	Fig 6-37 page 97
3B	Fig 3-3
3D	Fig 3-6
3F	Fig 4-8 inset Figure 4-6a
3E	Fig 4-9, 4-10, 4-11

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Also see 7-5 Ar<sup>+</sup> and C<sub>2</sub>H<sub>2</sub><sup>+</sup> at 92eV per C atom.

It would have been obvious to one of ordinary skill in the art to use the method and apparatus of Weiler to produce layers of highly tetrahedral amorphous<sup>s</sup> carbon optimizing properties within the ranges disclosed by Weiler and/or Veerasamy tailored to a particular end use.

Note that the process limitations of claims 59 and 60 carry no weight in these article claims unless it can be demonstrated that they produce a patentably distinct product.

Since both Mr. Veerasamy and Mr. Weiler are named as inventors of the present application it is requested that they particularly point out the unobvious advances of the present invention from their previous work (i.e. references BU and BQ).

It would have been obvious to one of ordinary skill in the art to use the carbon layer of Veerasamy or Weiler on the medium of Nakayawa et al since the carbon layer would be harder and more durable. Nakayama et al teach the use of carbon in the 3-15 angstrom<sup>thickness</sup> range in order to reduce spacing loss. (See also Takahashi cited below).

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takahashi et al is cited for teaching a highly tetrahedral amorphous carbon film used as a protective layer on a magnetic recording medium.

The thickness of the film may be a 20 Å -200Å Table 3 and the Id/Ig value is 0.8 to 3.


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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan Resan whose telephone number is 703-308-4287. The examiner can normally be reached on Tuesday-Friday; 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5436 for regular communications and 703-305-5436 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Resan:mv  
June 10, 2002

  
**STEVAN A. RESAN**  
**PRIMARY EXAMINER**